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THEOLOGY AND SCIENTIFIC METHOD

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In previous articles, we have attempted to indicate some of the consequences of the employment of biblical criticism, so far as it affects the task of the theologian. We saw that such critical study led one away from the dogmatic interpretation of Scripture, and introduced a historical point of view which compels us to regard the utterances of the Bible in their relation to the circumstances which occasioned them. The meaning of any scriptural passage is thus discovered when we ascertain what place it had in the experience of the man who uttered it. We found that when we proceed to investigate this experience, we come upon elements of thinking and upon specific practical problems which were very real to the biblical writers, but which may be quite unfamiliar to us. Thus biblical doctrines share the limitations of the thinking of the age in which they were produced. Moreover, since no man and no people could live in isolation from contemporary world-movements, we have come to see how inevitably the problems and the conclusions of the men of the Bible were influenced by the "pagan" ideas and practices of the time. Thus we have as the outcome of biblical criticism the necessity of conceiving theology as a living and changing movement of thought, rather than as a self-identical system.

If once we face this fact, we find that it involves a radical change in the method of constructing our theology. The traditional method assumed that we should find directly in the Scriptures what we ought to believe. But if we are compelled to admit that while we believe some of the statements of the Bible, we believe others only with modifications, and because of changed conditions of thinking disbelieve still others, it is evident that we can no longer discover just what the content of our theology should be by simply reading the Bible. How, then, shall we find out what to believe? This is the question which is eventually raised by one who follows the implications of biblical criticism.

The method of constructing doctrine by asking what is taught in an authoritative book comes from ancient times, and has so firmly established itself in the minds of men as the only proper one, that a proposal to abandon this *method* is readily interpreted as an abandonment of the *doctrines* guaranteed by it. If we give up this objective test of truth, men ask, shall we not be involved in hopeless confusion as the many minds of our varied civilization give their many answers to the problems before us? Thus while the method of scientific inquiry has made its way into one after another of the realms of human thinking, its progress has been delayed in the field of theology because of this not unnatural fear lest the precious truths of our religion shall be lightly abandoned.

This fear can be removed only by such an appreciation of the positive character of scientific method, that we shall feel in the realm of theology the same confidence in its use which we feel in its application to other realms. That this sense of positive value is growing is evident if once we make clear how our feelings have really altered in certain respects. For example, it is well known that when Copernicus set forth his theory concerning the heavens, it was felt that he was undermining Scripture. But today, we are reassured because we have had ample opportunity to see that the Copernican astronomy, instead of subtracting from the glory of the universe, has made it more wonderful than ever. Few of us would feel that religion would be the gainer by going back to the theory of creation which Luther felt to be absolutely essential.

Moreover, even if we should be compelled again to face a change of astronomical theory, no matter how radical, it would not be likely to cause any serious disturbance of our faith. We should instinctively feel in the realm of astronomy that if a new theory came to commend itself to scientific men generally, the world would be the richer rather than the poorer for the change. A new theory has no chance to gain universal approval unless it is actually a better means of bringing us into an understanding of reality than is the older theory. We feel, for example, that the purity of science is far better guaranteed by leaving open the opportunity for as frequent changes as may be necessary in order to maintain a truthful attitude toward the subject of our investigation. We should not

want a teacher of biology to swear unchanging allegiance to this or that particular content of doctrine. We should want him to be perfectly free to recognize any new data which might appear and to introduce into his theories such changes as were needed to bring doctrine into line with all the data accessible. We should not want our family physician to pledge himself irrevocably to any particular theory of disease or to the use of any specific remedy. We should rather want him to be so constantly watching the investigations of experts that he might at any time avail himself of any possible improvement in the understanding of the cause and the cure of disease.

Now this attitude of confidence in the use of the scientific method in these other realms has not been attained without a struggle. The physician still has to contend against various aspects of our inheritance from medicine men of the past, and against the therapeutic theories of various movements which, on the basis of a priori doctrines, discredit exact scientific methods of research. But it may be said that in this realm, as in many others, public sentiment now is increasingly in favor of an attitude of trust in scientific method. It should be repeated that *when once this type of confidence is established, there can be changes of content in theory without any shaking of the basis of confidence*. Even if we have temporarily to assume an attitude of agnosticism in consequence of exact investigation, we feel that such agnosticism is better than action on the basis of a theory which has been proved to be mistaken. So long as we possess accurate scientific method, and continue to use it patiently, we may hope that our lack of knowledge will some day pass into such an understanding of the matter that we may avail ourselves of all the resources of the universe for the realization of our highest desires.

A primary task of the theologian today is to cultivate the attainment of a spirit of trust in the adequacy of scientific method. The man who wants "assured results" of biblical criticism, in the sense that he may have furnished to him certain doctrines which may never have to be revised, is far from that attitude which is indispensable to any permanent co-operation between theology and the science of our day. Biblical criticism must insist on fidelity

to exact methods of research, so that one may never be obliged to feel that the partial knowledge which we have attained is final. It is because the present is not good enough and must be supplanted by a better future, that the biblical critic is eager not to close the record of investigations. Indeed, to promise "assured results" in this static sense would involve for the biblical critic the death of his science. There are no results so assured that they cannot conceivably be revised by more painstaking research. Even when critical study brings one to the reaffirmation of a traditional theological doctrine, the significance of this conclusion is very different from that assumed by the older theology. It is never "final" in the sense that it is declared to be infallibly correct. It is always regarded as valid only so long as it shall show itself to be actually superior to any other theory which criticism may suggest as an alternative.

Now, as has been said, while men have come to live with joy and confidence on the basis of the scientific attitude in other realms, the complete attainment of this attitude has been delayed in the field of theology, because religious convictions are so essential to our peace of mind, that we cannot bring ourselves to contemplate with patience the thought that we must abandon absolute certainty and begin groping after the truth. If we can feel that we have it once for all in infallible form, we can be relieved of the perplexity and uncertainty which would otherwise be inevitable. This has been the attitude inculcated by the church. Not infrequently a theologian has no other valid argument to oppose to innovations than that if one once begins to question, there will be no ending to the questioning attitude. If all our beliefs are turned into question marks, he asks, how can we maintain courage and hope? Because of the fact that it does put question marks in the place of many a dogmatic belief, criticism is frequently called "destructive."

In deference to this natural feeling, theologians have often been inclined to mitigate the radical nature of scientific procedure by attempting to discover some fixed quantity which they might retain as the basis for faith, and thus give to the altered content of a new theology a foundation as much like the old as possible. They have tried to make distinctions between the "form" and the

"essence" of biblical teaching, and while allowing criticism to dissolve the "form," if necessary, have insisted that the "essence" is not affected by critical questioning. In this way considerable modifications may be made in doctrines, while the older form of appeal to the authority of a revelation may not be altered. But why should criticism be allowed to deal with the "form," and not also with the "essence"? Can the mind be satisfied permanently with a method which provides that conclusions concerning some aspects of biblical doctrine shall be determined by the use of critical methods, while other aspects shall rest on the basis of an inherited belief in the inviolability of doctrine from criticism? Plausible as is this attempt at discrimination, necessary as it perhaps has been in a transition stage of thinking, it involves, if persisted in, a serious danger. Shall we, then, hold certain (non-essential) opinions because they have been critically tested, while we hold other (essential) convictions on the ground that these are "revealed"? Shall our beliefs concerning the most important aspects of religious life be allowed to rest on a less thorough-going scrutiny than our opinions concerning what is of slighter importance? Is such a position really as strong as the more radical proposition to admit everything alike to the testing process of critical, scientific investigation?

A certain conscientious church member, who had watched the changes coming in the realm of theology, and had seen how the direful predictions of those who dreaded the innovations had not been fulfilled, finally expressed himself as follows: "I see that the time is at hand when we shall all believe just what we really do believe." No better formulation of the outcome of the adoption of the scientific attitude in theology could be made. To believe just what we really do believe is the goal whither we are tending. The theologies of authority dare not trust that ideal. In Catholicism, by the exercise of implicit faith, the layman is expected to assent to theological propositions which may mean nothing to him. In Protestantism, pressure is brought to bear on men so that they are apt to be more concerned to find a way in which they can without dishonesty affirm the faith of the creeds than to discover exactly what possesses convincing quality. But if a doctrine does not

actually play a positive part in shaping one's religious life, can the affirmation of it be a matter of great significance? The application of the scientific method to the study of theology would mean that the right of way would be given to those doctrines which serve to promote and to interpret religious life. The reasons for their convincing power would be made plain, and they would thus be firmly established in the affections and the thinking of men. On the other hand, if a doctrine is discovered to be actually losing its hold on men, the scientific theologian will ask why this decline of interest exists. If it is due to the fact that changing characteristics of human experience have made antiquated the presuppositions of the older faith, that fact will be clearly stated, and the doctrine be forthwith revised. If, on the other hand, scientific investigation should discover some shallowness of present-day life as the cause, that shallowness would be revealed and corrected in order that men might not sink below the level of their best possible attainments.

What is needed is the recognition of the fact that doctrines are secondary, tributary to great fundamental life interests. At best they are merely more or less successful devices for symbolizing experience. If a given statement arouse no inner apprehension of its meaning in experience, that statement is absolutely useless. Its "truth" may be logically defensible; but it has lost all connection with reality. A crude philosophy which actually serves to express and promote experience is better than a formally complete system which means nothing. The primary reality is not to be found in doctrine as such, but rather in that experience through which we gain our first-hand contact with the manifold nature of the universe in which we live. The adoption of the scientific method in the study of biblical literature reveals to us clearly this intimate connection between the convincing power of a doctrine and the life which could make use of the doctrine in order to make more real its contact with the great facts of human experience. The great prophets were not concerned to conserve a system as such. They insisted on believing what they really believed. Jesus used so little of formal theology that the system-makers have been obliged to give surprisingly little space in their expositions to the contribution which he made. Paul was ready to eliminate from his Christianity

the rite of circumcision, although it was plainly commanded in his Bible. All this was in order to make faith genuine and transforming. These great men in the Bible stand for an attitude so completely in harmony with what we today know as the scientific method, that if a theology employing this method wished to appeal to authority (an appeal which, however, would involve the actual abandonment of the method itself), it could amply justify itself by the examples of the supreme religious thinkers in biblical history. This fact alone ought to reassure us. It is *prima facie* evidence that a theology which follows the spirit of scientific honesty is not likely to become anti-biblical in its influence.¹

We must, however, not blind ourselves as to what is involved in the thoroughgoing adoption of the scientific spirit in the construction of theology. Two points especially need to be noted, in which a striking difference appears between a scientific theology and a "dogmatic" theology.

1. *No doctrine can be regarded as final in content.*—Here appears the place where the older type of loyalty and the new come into sharpest conflict. It is a well-known fact that the development of a sense of historical perspective is a comparatively modern acquisition. Even today, it is hard for us to realize that men ever felt as they did on certain subjects. It seems incredible that such evidently genuine fear of witchcraft should have possessed intelligent people in Salem not so very long ago. We inevitably feel that what is superstition to us must also have appeared as superstition to men of a different age; and that what we regard as true must have seemed equally true to all ages. In the realm of religious beliefs, this natural tendency to read the past in terms of our own ideals is reinforced by the inherited theory that the content of religious belief was not evolved under the influence of changing experiences, as were other convictions, but that theological doctrines were directly revealed so that all the Christian generations had access to an infallible source of truth. Any proposal to change the content of Christian belief, therefore, has met not only with the

¹ Cf. the remark of President King (*The Ethics of Jesus*, p. 84), "But if the man of the right life (the disciple of Jesus) is to be absolutely true to the inner vision, he needs to see straight; . . . that is, he must have what we moderns call the *scientific spirit*" (italics mine).

natural conservatism of the human mind, but also with the assumption that since God had revealed the content of the established theology, any different theology must be less in accord with the will of God. Thus loyalty to the truth seemed to demand loyalty to the system. It is still very generally regarded as "infidelity" if one disapproves any important elements of the traditional theology.

Now so long as the adoption of the scientific method is interpreted to mean nothing more than the right to deny certain items in the authorized system, it fails to have any moral value. Indeed, it appears like a distinct program of disloyalty. The right to deny is not in and of itself so admirable that it can claim immunity on that ground alone. But, as was remarked in the first article of the series, criticism means asking questions for the purpose of obtaining more reliable knowledge. It is the more reliable knowledge, or at least the attaining of a position and a method by which this more reliable knowledge may be obtained, which alone can justify the departure from the older theories. The revisions of traditional opinions concerning the date and authorship and meaning of some of the books of the Bible have come from a more adequate knowledge of Israelitish history. And it is in the light of this growing knowledge of that extraordinarily significant history that critical scholars refuse to declare any conclusion to be final. Every critical conclusion is open to revision. Biblical scholars take this for granted.

So, too, a better understanding of church history shows us how constantly Christian beliefs have altered. Since humanity is always experimenting, it is unconsciously adopting the scientific attitude. The experiments, it is true, are not always conducted in so exact a way and with such a careful tabulating of results that a critical method of revision is established; but none the less, a change of theory results from the actual demands of social experiment. Take, for example, the doctrine of the atonement. It has in past centuries passed through several forms, some of them seeming to us today to be grotesque, and others seeming to fail in ethical quality. But when we know accurately the age in which they held sway, we see how appropriate they were to the general frame of mind in which all problems were discussed. The feudal system, with

its conception of class distinctions, and of obligations to the "honor" of the feudal lord, gave rise to Anselm's argument. But when a democratic conception of human relations comes to prevail, a doctrine based on feudal analogies ceases to be convincing. Indeed, one of the reasons why the old theology has lost its moral power today over so many men is precisely because it is essentially aristocratic in its way of picturing relations between man and God. When our conceptions of ethical relationship are conditioned by democratic social experience, we can no longer find satisfaction in theological conceptions which appeal to "divine rights." The marked change of emphasis from the sovereignty of God to the love of God in modern religious thinking is partly due to the desire to feel that God is interested in our democratic human achievements more than insistent on his own glory.

It is thus an undeniable fact that theology changes as the experience of man changes. The adoption of the scientific method would simply mean that we recognize this fact in all its significance, and that instead of opposing changes purely because they conflict with the divine rights of the older system, we proceed to interpret and guide the social strivings which are making for a change, so that the experiment may be more fruitfully conducted. Think of the wasted strength of the well-intentioned attacks by theologians and ministers on the doctrine of evolution! It was assumed that the new conception was to be resisted just because it introduced radical changes in the content of theology. And now, in belated fashion, we are taking back the strenuous objections of our fathers, and are discovering that the doctrine is after all not so dangerous to faith as they had supposed. Indeed, in the hands of Henry Drummond, it became one of the most suggestive means of giving new vitality to some of the truths of Christianity. The adoption of the scientific attitude in theology would avoid that needless warfare between science and religious thinking which is made inevitable by the attitude of loyalty to authority. Since in God's providence the changes in theology come anyway, since all the theological opposition in the world cannot prevent Copernicus and Darwin from actually controlling the conditions of our thinking, is it not better in every way for the theologian to assume such

a trust in critical scientific investigation that he may have a positive share in making the changes instead of having to play the inglorious part of an obstructionist who eventually is compelled to yield without any credit for his reluctant change? If Christian theology had not been so hostile to the discoveries of modern science, would that science have produced a "materialism" devoid of religious significance? Should we not rather have grown gradually and naturally into a larger conception of religion which should be adequate to the larger universe in which we find ourselves? To cease to be afraid of changes in theology is demanded by the adoption of the scientific spirit. To have a large part in the formulation of meanings which emerge in the new theories of growing knowledge should be the aim of the Christian theologian. But such a contribution is possible only as the fullest and heartiest adoption of the scientific spirit shall prevail.

2. *The study of religion itself is the means by which to criticize and correct theology.*—The outcome of the scientific study of the Bible, as we have seen, has been to transfer attention from the doctrines of the Bible as such to the life which expressed itself in the doctrines. Scholars are not now so much interested in biblical "truths" as they are in the religious life which they discover through a careful study of the biblical literature. The scientific attitude in the field of systematic theology will involve a like shifting of interest. The value of a system will not be judged so much by its formal completeness as by its capacity to suggest the deeper meanings of the religious life itself.

This understanding of the nature of religion is especially necessary today, when the content of doctrines is being so rapidly altered. The situation is extremely puzzling to many men who ought to be leaders of thought. They have been taught to think of theology as a system of truth which must be maintained intact. Their loyalty to this ideal often leads to opposition to change, and may throw the leadership of the changing ideals into the hands of those who are hostile to the evangelical interests of Christianity. But an accurate understanding of religion itself would prevent this unfortunate identification of faith itself with a single formulation of faith.

In general, it may be said that the most sympathetic interpre-

tations of past phases of religious belief come from those who have learned to study religion itself, rather than doctrines isolated from the life in which alone they have any meaning. One who is thus equipped sees why certain social or political or economic conditions make inevitable the asking of certain questions, the answers to which assume great importance. When any of these conditions change, the questions which are asked also change. Now one who actually knows religion as it historically exists will see why changes in doctrine took place, and will be able to give a just interpretation of the situation.

This practice of the scientific imagination in the realm of history is coming to be very common. It is this which gives to modern books on the religion of the Bible their attractiveness and their flavor of reality. To carry over into the field of constructive theology this same method and this same attitude is indispensable, if the theologian is really to be able to tell men what they ought to believe. That momentous changes have taken place in our life in the past century is evident to all. That the changes are bringing important alterations in our religious beliefs and practices is equally evident. Insensibly men perceive that a mere repetition of the old doctrines does not reveal that vital touch with the age which is imperative. Now the only way in which to avoid serious mistakes in the adjustment of our theology is to understand the exact nature of the religious needs of today, as these are conditioned by our circumstances. It is easy enough to persist in holding to the established forms of belief, even though these have lost their power to convince. Or it is equally easy to go to the opposite extreme, and forfeit all historical religious values in an attempt to be accurately scientific in all matters save the one item of religion itself. Only the man competent to investigate the actual *religious* phenomena is in a position to do justice to the religious needs by a theology which can claim a right to the affections of men. There is grave danger here lest we may allow the diagnosis to be made by those whose interests are not primarily religious, and who shall therefore fail to discern some of the most essential elements in the problem of interpreting life.

This demand for a norm growing out of an accurate under-

standing of religion involves a significant change in the method of constructing theology. In the place of the older plan of establishing a theory of inspiration which guaranteed the truth of the biblical statements from which theology was to be derived, the scientific ideal places first a thorough study of religion itself—of the religion of the Bible, of course, but also of the religion of extra-biblical times—so as to gain a clear conception of the function of doctrine in a growing and changing religious life. With the knowledge thus gained, the theologian will survey the changes taking place in his day with the sympathy gained by expert knowledge, and will actually take the lead in suggesting improved formulae in which religious faith may find adequate expression in the light of present conditions. The norm for the construction of theology is no longer to be found in any given statement of faith, or in any isolated section of history, but rather in the immanent principles of growth and life which are to be ascertained by a knowledge of the facts of religion itself. When once this method of theologizing shall have come to prevail, we shall have a means of keeping religious experience and religious doctrine in such close interrelation that the historical changes which take place will be accompanied by an adequately developing theology. One of the chief obstacles today to the reinstatement of theology into a place of influence is the timidity of theologians about committing themselves without hesitation to the scientific attitude. Only as this shall have been accomplished will the positive value of critical biblical scholarship be so felt as to reinforce and invigorate our theology.